

**SEVENTH APPROXIMATION  
DATA FORM FOR CONVENTIONAL ASSESSMENT UNITS (NOGA, Version 5, 6-30-01)**

**IDENTIFICATION INFORMATION**

Assessment Geologist:.....	J.L. Ridgley	Date:	9/25/2002
Region:.....	North America	Number:	5
Province:.....	San Juan Basin	Number:	5022
Total Petroleum System:.....	Mancos-Menefee Composite	Number:	502203
Assessment Unit:.....	Gallup Sandstone Conventional Oil and Gas	Number:	50220302
Based on Data as of:.....	PI/Dwights 2001, NRG 2001 (data current through 1999)		
Notes from Assessor:.....			

**CHARACTERISTICS OF ASSESSMENT UNIT**

Oil (<20,000 cfg/bo overall) or Gas (≥20,000 cfg/bo overall):... Oil

What is the minimum accumulation size?..... 0.5 mmboe grown  
(the smallest accumulation that has potential to be added to reserves in the next 30 years)

No. of discovered accumulations exceeding minimum size:..... Oil: 2 Gas: 0  
Established (>13 accums.) \_\_\_\_\_ Frontier (1-13 accums.) X Hypothetical (no accums.) \_\_\_\_\_

Median size (grown) of discovered oil accumulation (mmbo):  
1st 3rd \_\_\_\_\_ 2nd 3rd \_\_\_\_\_ 3rd 3rd \_\_\_\_\_  
Median size (grown) of discovered gas accumulations (bcfg):  
1st 3rd \_\_\_\_\_ 2nd 3rd \_\_\_\_\_ 3rd 3rd \_\_\_\_\_

**Assessment-Unit Probabilities:**

<u>Attribute</u>	<u>Probability of occurrence (0-1.0)</u>
1. <b>CHARGE:</b> Adequate petroleum charge for an undiscovered accum. ≥ minimum size.....	<u>0.8</u>
2. <b>ROCKS:</b> Adequate reservoirs, traps, and seals for an undiscovered accum. ≥ minimum size.....	<u>1.0</u>
3. <b>TIMING OF GEOLOGIC EVENTS:</b> Favorable timing for an undiscovered accum. ≥ minimum size.....	<u>1.0</u>

**Assessment-Unit GEOLOGIC Probability** (Product of 1, 2, and 3):..... 0.8

4. **ACCESSIBILITY:** Adequate location to allow exploration for an undiscovered accumulation  
≥ minimum size..... 1.0

**UNDISCOVERED ACCUMULATIONS**

**No. of Undiscovered Accumulations:** How many undiscovered accums. exist that are ≥ min. size?:  
(uncertainty of fixed but unknown values)

Oil Accumulations:.....min. no. (>0)	<u>1</u>	median no. <u>2</u>	max no. <u>4</u>
Gas Accumulations:.....min. no. (>0)	<u>0</u>	median no. <u>0</u>	max no. <u>0</u>

**Sizes of Undiscovered Accumulations:** What are the sizes (**grown**) of the above accums?:  
(variations in the sizes of undiscovered accumulations)

Oil in Oil Accumulations (mmbo):.....min. size	<u>0.5</u>	median size <u>1</u>	max. size <u>15</u>
Gas in Gas Accumulations (bcfg):.....min. size		median size	max. size

**AVERAGE RATIOS FOR UNDISCOVERED ACCUMS., TO ASSESS COPRODUCTS**

(uncertainty of fixed but unknown values)

<u>Oil Accumulations:</u>	minimum	median	maximum
Gas/oil ratio (cfg/bo).....	75	150	225
NGL/gas ratio (bnl/mmcf).....	5	10	15
<u>Gas Accumulations:</u>	minimum	median	maximum
Liquids/gas ratio (bliq/mmcf).....			
Oil/gas ratio (bo/mmcf).....			

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**SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS**

(variations in the properties of undiscovered accumulations)

<u>Oil Accumulations:</u>	minimum	median	maximum
API gravity (degrees).....	20	28	32
Sulfur content of oil (%).....	0.2	0.25	0.5
Drilling Depth (m) .....	121	487	945
Depth (m) of water (if applicable).....			
<u>Gas Accumulations:</u>	minimum	median	maximum
Inert gas content (%).....			
CO <sub>2</sub> content (%).....			
Hydrogen-sulfide content (%).....			
Drilling Depth (m).....			
Depth (m) of water (if applicable).....			

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**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO STATES**  
**Surface Allocations** (uncertainty of a fixed value)

1. New Mexico represents 100.00 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	100	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

2. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

3. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

4. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

5. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

6. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

7. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

8. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO LAND ENTITIES**  
**Surface Allocations** (uncertainty of a fixed value)

1. Federal Lands represents 10.61 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....			
Volume % in parcel (areal % x richness factor):...		7	
Portion of volume % that is offshore (0-100%):.....		0	
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....			
Volume % in parcel (areal % x richness factor):...			
Portion of volume % that is offshore (0-100%):.....			

2. Private Lands represents 16.83 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....			
Volume % in parcel (areal % x richness factor):...		20	
Portion of volume % that is offshore (0-100%):.....		0	
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....			
Volume % in parcel (areal % x richness factor):...			
Portion of volume % that is offshore (0-100%):.....			

3. Tribal Lands represents 67.90 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....			
Volume % in parcel (areal % x richness factor):...		70	
Portion of volume % that is offshore (0-100%):.....		0	
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....			
Volume % in parcel (areal % x richness factor):...			
Portion of volume % that is offshore (0-100%):.....			

4. Other Lands represents areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....			
Volume % in parcel (areal % x richness factor):...			
Portion of volume % that is offshore (0-100%):.....			
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....			
Volume % in parcel (areal % x richness factor):...			
Portion of volume % that is offshore (0-100%):.....			

5. NM State Lands represents 4.66 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	3	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

6. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

7. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

8. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

9. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

10. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

11. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

12. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO FEDERAL LAND SUBDIVISIONS**

**Surface Allocations** (uncertainty of a fixed value)

1. Bureau of Land Management (BLM) represents 7.76 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	5.12	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

2. BLM Wilderness Areas (BLMW) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

3. BLM Roadless Areas (BLMR) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

4. National Park Service (NPS) represents 0.94 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	0.62	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____



5. NPS Wilderness Areas (NPSW) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

6. NPS Protected Withdrawals (NPSP) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

7. US Forest Service (USFS) represents 1.91 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1.26	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

8. USFS Wilderness Areas (USFSW) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

9. USFS Roadless Areas (USFSR) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

10. USFS Protected Withdrawals (USFSF) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

11. US Fish and Wildlife Service (USFWS) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

12. USFWS Wilderness Areas (USFWSA) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

13. USFWS Protected Withdrawals (USF) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

14. Wilderness Study Areas (WS) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

15. Department of Energy (DOE) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

16. Department of Defense (DOD) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

17. Bureau of Reclamation (BOR) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

18. Tennessee Valley Authority (TVA) represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

19. Other Federal represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

20. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO ECOSYSTEMS**  
**Surface Allocations** (uncertainty of a fixed value)

1. Navajo Canyonlands (NVCL) represents 42.69 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	<u>45</u>	_____
Portion of volume % that is offshore (0-100%):.....	_____	<u>0</u>	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

2. White Mountain-San Francisco Peaks represents 57.31 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	<u>55</u>	_____
Portion of volume % that is offshore (0-100%):.....	_____	<u>0</u>	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

3. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

4. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

5. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

6. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

7. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

8. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

9. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

10. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

11. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

12. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO LAND ENTITIES**  
**Subsurface Allocations** (uncertainty of a fixed value)

Based on Data as of: \_\_\_\_\_

1. All Federal Subsurface represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

2. Other Subsurface represents \_\_\_\_\_ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____